

Title (en)
CAPILLARY FEED BOILER

Title (de)
VERDAMPFUNGSBRENNER MIT FLÜSSIGKEITZUFUHR DURCH KAPILLARWIRKUNG

Title (fr)
BRULEUR-EVAPORATEUR ALIMENTE EN LIQUIDE PAR CAPILLARITE

Publication
EP 0827584 A4 19991117 (EN)

Application
EP 96913923 A 19960503

Priority
• US 9606230 W 19960503
• US 43909395 A 19950510

Abstract (en)
[origin: WO9635908A1] A liquid boiler (10) generates vapor at low pressure from liquid in reservoirs that are not pressurized. Liquid from a reservoir (150) is fed through a supply wick (40) by capillary action to a boiler wick (20) in which the liquid is heated and boiled to a vapor. The heat for vaporization is transmitted by a porous hot seat (30) which sits atop and is in contact with the boiler wick (20). The boiler wick (20) and hot seat (30) are contained in an insulating cylindrical shroud (19), which forms a tight seal with the edges of the boiler wick (20). If the liquid to be vaporized is a fuel for a burner, then combustion heat can be used to supply the heat to the boiler. A resistive heat can also be used to heat the hot seat and boiler wick.

IPC 1-7
F23D 11/00; **F23D 11/44**; **F23Q 3/00**; **F23Q 7/06**; **F23Q 7/08**; **F23Q 7/12**; **F24C 5/02**; **F24C 5/04**; **F24F 6/08**

IPC 8 full level
F23D 3/02 (2006.01); **F23D 3/04** (2006.01); **F23D 3/18** (2006.01); **F23D 3/40** (2006.01); **F23D 11/44** (2006.01); **F23K 5/22** (2006.01); **F24C 5/00** (2006.01); **F24C 5/04** (2006.01)

CPC (source: EP US)
F23D 3/02 (2013.01 - EP US); **F23D 3/04** (2013.01 - EP US); **F23D 3/40** (2013.01 - EP US); **F23D 11/445** (2013.01 - EP US)

Citation (search report)
• [A] GB 1095929 A 19671220 - WESTINGHOUSE ELECTRIC CORP
• [A] US 5405262 A 19950411 - APPEL RON I [US]
• [A] DE 8503471 U1 19860703
• [A] DE 9210029 U1 19920924
• [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 218 (M - 711) 22 June 1988 (1988-06-22)
• See references of WO 9635908A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)
WO 9635908 A1 19961114; AT E282793 T1 20041215; AU 5674396 A 19961129; BR 9608456 A 19990824; CA 2218871 A1 19961114; CN 1138091 C 20040211; CN 1191013 A 19980819; DE 69633859 D1 20041223; DE 69633859 T2 20051208; EP 0827584 A1 19980311; EP 0827584 A4 19991117; EP 0827584 B1 20041117; JP 3637065 B2 20050406; JP H11505318 A 19990518; MX 9708515 A 19980430; US 5692095 A 19971125; US 5870525 A 19990209

DOCDB simple family (application)
US 9606230 W 19960503; AT 96913923 T 19960503; AU 5674396 A 19960503; BR 9608456 A 19960503; CA 2218871 A 19960503; CN 96195449 A 19960503; DE 69633859 T 19960503; EP 96913923 A 19960503; JP 53413896 A 19960503; MX 9708515 A 19960503; US 43909395 A 19950510; US 94603397 A 19971007